

PROJECT DESCRIPTION

1. GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 7 (PHILADELPHIA RD) AT I-695 SOUTHBOUND RAMP IN BALTIMORE COUNTY. THE EXISTING STRAIN POLES AND SPAN WIRE SHALL BE REPLACED WITH NEW MAST ARM POLES, LED SIGNAL HEADS AND VIDEO DETECTION CAMERAS. MD 7 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

11. INTERSECTION OPERATION

- THE INTERSECTION IS TO OPERATE IN A NEMA 4-PHASE, FULLY-ACTUATED MODE WITH AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FROM WESTBOUND MD 7 TO I-695 SOUTHBOUND. THE EASTBOUND AND WESTBOUND MOVEMENTS ON MD 7 OPERATE CONCURRENTLY AND THE SOUTHBOUND MOVEMENT OPERATES ON ITS OWN PHASE.
- A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT AND ALL NECESSARY EQUIPMENT, TELEMETRY HOUSED IN A NEMA SIZE "6" BASE-MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

CAT CODE	QUANTITY	DESCRIPTION
900000	1 EA	[UPDATED] CONTROLLER ASC II WITH TELEMETRY
900000	1 EA	[UPDATED] CONTROLLER CABINET, SIZE 6
900000	24 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN
	1 EA	SHIELD ASSEMBLY SIGN GROUND MOUNTED
	1 EA	M3-3 "SOUTH" (30"x15"), M1-1 "I-695" (48"x36"), M6-1 "LEFT ARROW" (30"x24")
	1 EA	OM-3R "OBJECT MARKER" (12"x36")
900000	45 EA	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN
	1 EA	SHIELD ASSEMBLY SIGN (36"x75") POLE MOUNTED
	1 EA	M3-2 "EAST" (30"x15"), M1-5 "MD 7" (36"x36"), M6-1 "LEFT ARROW" (30"x24")
	1 EA	R3-6 "LEFT THRU ONLY" SIGN (30" X 36") MAST ARM MOUNTED
	1 EA	R3-5(L) "LEFT ONLY" SIGN (30"x36") MAST ARM MOUNTED
	1 EA	D-3(1) "PHILADELPHIA RD" (VAR. X 16") MAST ARM MOUNTED
900000	1 EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 5-8 CAMERAS

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

CAT CODE	QUANTITY	DESCRIPTION
203030	2 CY	TEST PIT EXCAVATION
585627	41 SF	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS & SYMBOLS
800000	3 EA	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
800000	248 LF	DISCONNECT, PULL BACK & REROUTE CABLE
800000	240 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - BORED
800000	395 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - TRENCHED
800000	69 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
800000	1 EA	MAST ARM POLE & 50 FT MAST ARM ANY "T" DIMENSION
800000	1 EA	TWIN MAST ARM POLE & 50 FOOT / 70 FOOT MAST ARMS ANY "T" DIMENSION
800000	1 EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP & LUMINAIRE
800000	5 EA	VIDEO DETECTION CAMERA & CABLE UP TO 500 FT
800000	4 EA	REMOVE SIGNAL POLE FOUNDATION 12" BELOW GRADE
801104	16 LF	WOOD SIGN SUPPORTS 4 INCH x 4 INCH
801106	37 LF	WOOD SIGN SUPPORTS 4 INCH x 6 INCH
802501	210 LF	NO.6 AWG STRANDED BARE COPPER GROUND WIRE
807202	1 EA	METERED SERVICE PEDESTAL EMBEDDED
810010	60 LF	ELECTRICAL CABLE 1-CONDUCTOR, NO.4 AWG THHN/THWN
811001	4 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
860284	25 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860292	2 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861107	70 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	890 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
861116	185 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG), TC
871202	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

C. IF THE CABINET IS TO BE REMOVED SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR, EXCEPT FOR VIDEO DETECTION CAMERAS, SHALL BECOME THE PROPERTY OF THE CONTRACTOR. EXISTING VIDEO DETECTION CAMERAS SHALL BE RETURNED TO SHA SIGNAL SHOP PERSONNEL AT TURN-ON.

CONTACTS

DISTRICT

MS. ERIN KUHN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
410-321-2781

MR. DONALD SCHAEFER
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
410-321-2821

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
410-321-2761

MR. MICHAEL PASQUARIELLO
ASSISTANT DISTRICT ENGINEER - UTILITIES
410-321-2841

MR. DAVID CASTLE
BALTIMORE GAS & ELECTRIC - ELECTRICAL SERVICE
1-800-233-1854

OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.
CHIEF, TRAFFIC OPERATIONS
410-787-7630

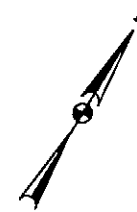
MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
410-787-7650

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
410-787-7670

MS. DARLENE EIDE
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)
410-787-7668

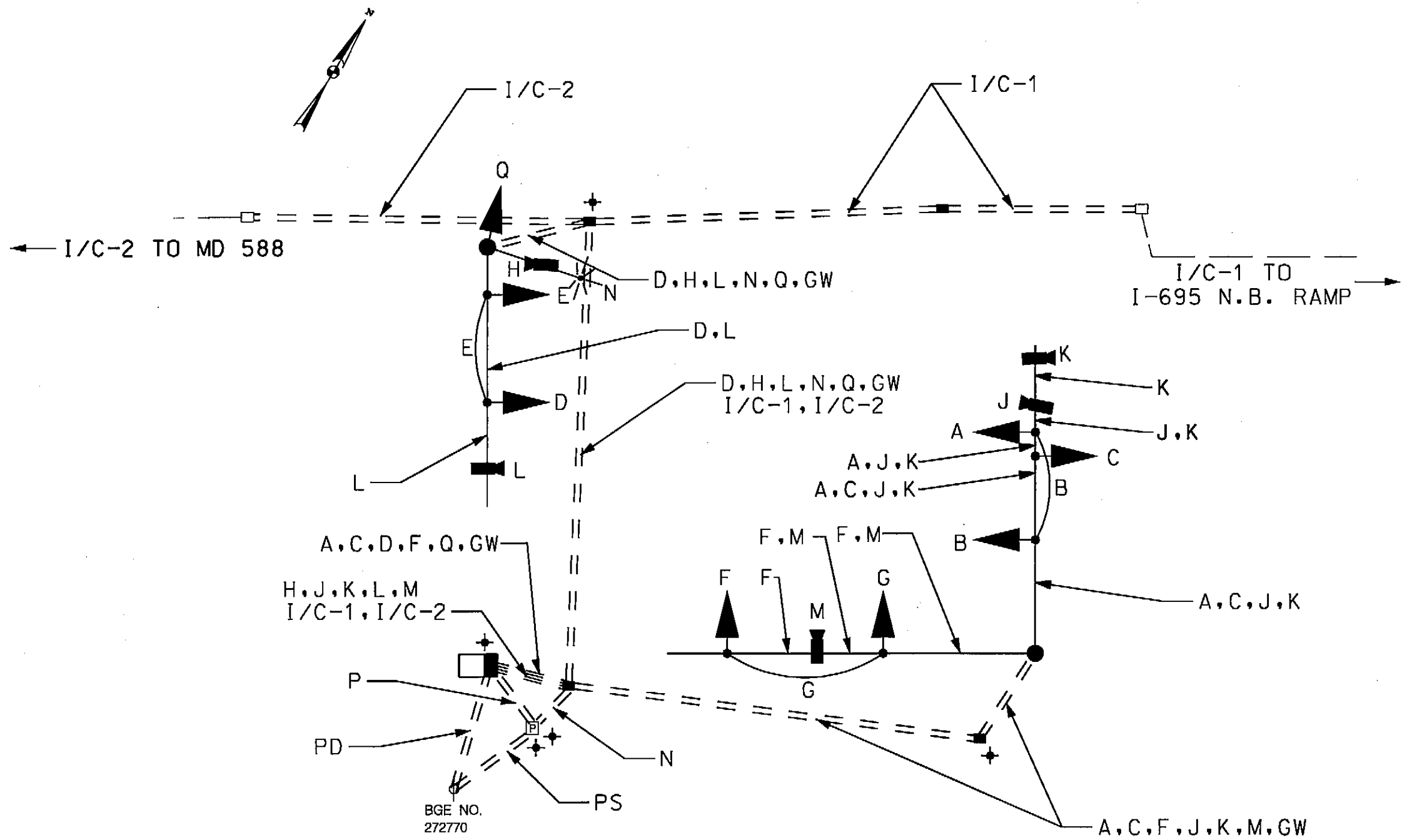
PHASE CHART



1	2	3	4	5	6	7	8
(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)

PHASE 2 AND 5	R	R	←G/G	←G/G	G	R	R	R	↑
5 CHANGE	R	R	←Y/G	←Y/G	G	R	R	R	↑
PHASE 2 AND 6	G	G	G	G	G	R	R	R	↑
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	↑
PHASE 4	R	R	R	R	R	G	G	G	↑
4 CHANGE	R	R	R	R	R	Y	Y	Y	↑
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	↑

WIRING DIAGRAM



WIRING KEY

- A.C.D.F.Q - 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- B.E.G - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- H.J.K.L.M - VIDEO DETECTION LEAD-IN CABLE
- N - 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
- P - 3 - 1 CONDUCTOR NO. 4 AWG THHN/THWN
- GW - 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
- PS - PROPOSED SERVICE UNDERGROUND
- PD - PROPOSED PHONE DROP
- I/C-1 - INTERCONNECT TO I-695 N.B. RAMP
- I/C-2 - INTERCONNECT TO MD 588
- ⚡ - GROUND ROD



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 7 (PHILADELPHIA RD) AND I-695 I.L. S.B RAMP
ROSEDALE, MARYLAND

GENERAL INFORMATION PLAN

SCALE N.T.S. DATE 6/1/09 CONTRACT NO. BA1195168

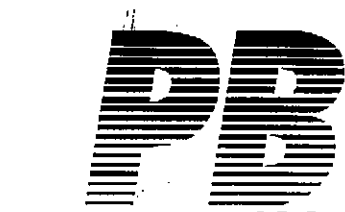
DESIGNED BY K. PERMISOHN COUNTY BALTIMORE

DRAWN BY M. ESKINAZI LOGMILE 03000702.48

CHECKED BY D. MACLEAN TMS NO. J639

FAP NO. TOD NO.

TS NO. 4719A GI DRAWING SP-20 OF 39 SHEET NO. 2 OF 2



PARSONS BRINCKERHOFF
100 South Charles Street
Tower 1, 10th Floor
Baltimore, MD 21201-2727
Phone: 410-727-5050
Fax: 410-727-4608